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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,542	07/10/2003	Yuhi Tokita	YKIA121430	4280
26389	7590	01/25/2006	EXAMINER	
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347			GOMA, TAWFIK A	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/617,542

Applicant(s)

TOKITA ET AL.

Examiner

Tawfik Goma

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 11 is/are allowed.
- 6) ☒ Claim(s) 8-10 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Objections***

Claim 15 is objected to because of the following informalities: The claim recites the term "said data" in lines 7 and 10. The examiner recommends that the term "said data" should read "said test data" in order to clarify the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-10 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Goro (JP Publication 11-025491).

Regarding claim 8 and 12, Goro discloses an optical disk apparatus for recording data on an optical disk (Drawing 2), comprising means for detecting first reproduced signal quality of test data obtained after test data recorded with write power lower than write power P of a laser beam have been overwritten with said write power P or second reproduced signal quality of test data obtained after test data recorded with write power higher than said write power P have been overwritten with said write power P (Abstract and par. 76 of Detailed Description); and means for setting optimum write power on

the basis of said first reproduced signal quality or said second reproduced signal quality (Detailed Description par. 79-80). Goro discloses that the random data is overwritten repeatedly using different laser powers and that the optimum laser power is determined based on a comparison of the error signal from the recorded data with a predetermined threshold value.

Regarding claim 9 and 13, Goro further discloses wherein said first and second reproduced signal qualities are jitter or an error rate (Detailed Description, par. 79), and said setting means sets, as said optimum write power, write power  $P$  at which said jitter or error rate becomes lower than or equal to said threshold value (Detailed Description, pars. 79-80).

Regarding claim 10 and 14, Goro further discloses wherein said first and second reproduced signal qualities are jitter or an error rate (Detailed Description, par. 79), and said setting means sets, as said optimum write power, a minimum write power level from among write power levels  $P$  at which a rate of change in said jitter or error rate with regard to said write power  $P$  is lower than or equal to a predetermined threshold value ( $P_{set}$ , Drawing 4 (b), and Detailed Description, par. 51). Drawing 4b, shows that the rate of change at the optimum power level is minimum at  $P_{set}$ .

***Allowable Subject Matter***

Claims 1-7 and 11 are allowed over the prior art of record because the prior art of record including closest Japanese Publication (11-025491) and Masaki et al (US Patent Publication 2002/0036962) considered in combination or individually, fail to suggest or fairly teach an optimum power setting recording apparatus including a combination of monitoring an error rate while overwriting test data repeatedly while incrementing the laser power and monitoring the error rate while overwriting test data repeatedly while decrementing the laser power; and determining an optimum power based on the difference between the monitored error rate of the incremented power case and monitored error rate of the decremented power case.

Claim 15 is allowable for the same reasons as claims 1-7 and 11 above.

***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Minemura et al (US patent 6463020) discloses an optimum power setting apparatus that can determine the optimum power based on an average power level existing between low and high power conditions. Mashimo et al (US Patent 6778478) discloses an optical recording apparatus that determines an optimum power by overwriting and measuring a modulation degree. Masaki et al (US Patent 6115338) discloses a light emission adjusting device that can be used for an overwriting medium.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tawfik Goma  
1/12/2006

  
Thang V. Tran  
Primary Examiner  
1/12/2006